

NFRWQPA 2011 WATER QUALITY PLAN UPDATE
Major Point Source Inventory Data

Operating Agency: **Town of Mead**

Utility Plan: Conditional Approval 11/2006

CDPS Permit #: Main: CO-0046876

Permit Expires: 2/28/2011

Lake Thomas: CO-0046868

9/30/2014

Description of Treatment Facilities: Main: Headworks with screening grit removal, flow measurement, sequencing batch reactor, flow equalization, aerobic digestion, and UV disinfection. Lake Thomas: Aerated lagoon.

Treatment Facility Location: Main: NE ¼, NW ¼, Section 14, T3N, R68W. Lake Thomas: SE 1/4, SW ¼, Section 13, T3N, R68W.

Discharge Location: Main: COSPSV06, Unnamed tributary to St. Vrain Creek. Lake Thomas: COSPSV06, Unnamed tributary to Lake Thomas.

Stream Segment Classification: Use Protected, Class 2 Warm Water Aquatic Life, Recreation Class E, and Agriculture.

Service Area Population:

Existing	2015	2020	2025	2030
2,838	4,193	5,352	6,830	

Note: Approximately 1,025 people (300 homes) are utilizing septic systems for their wastewater disposal.

Capacities:

		Design Capacity	Existing Load	2015	2020	2025	2030	Year at 80% Design	Year at 95% Design
Main	Flow (mgd)	0.5	0.1	0.261	0.316	0.387		>2025	>2025
	Organic (lbs/day BOD ₅)	1,286	167	589	752	960		>2025	>2025
Lake Thomas	Flow (mgd)	0.012	0.002	0*	0*	0*		NA	NA
	Organic (lbs/day BOD ₅)	33	No discharge anticipated						

*The Lake Thomas plant receives minimal flows and has not discharged since 1998

Biosolids treatment and disposal: Main facility: Aerobic digestion with contract land application.

Treatment level: The degree of treatment required and effluent limitations are outlined in Permit #CO-0046876 for the main facility and Permit # CO-0046868 for the Lake Thomas facility.

Estimated 5-year construction needs: In January, 2009 the town completed construction of a 0.5 mgd sequencing batch reactor facility which replaced the previous lagoon facility. No facilities are required for the next five years however the Town is considering a new interceptor sewer to the Rademacher Business Park which is currently served by septic tanks, many of which have failed, and to the North Creek Subdivision to eliminate a 20 year old lift station.